Socioemotional Selectivity through an Eriksonian Lens: The Benefits of Emotional Social Support Across the Lifespan

Abstract

Introduction

Perceived Social Support (PSS) is protective against depression. However the nature of the relationship may vary across the lifespan. Socioemotional Selectivity Theory suggests emotional regulation is the key function of social engagement in older age, with information and self-concept being more important functions in emerging adulthood; thus emotional PSS (ESS) may be a stronger influence on depression in older than younger people. Erikson's psychosocial theory suggests subtypes of ESS might prove important at different lifestages; emotionally meaningful contact being more important in older, affection and fun in younger people.

Objectives

To investigate the contributions of ESS and its components to models of depression in older and emerging adults.

Method

A survey, with data from 74 older and 538 emerging adults, was employed.

Results

Emotionally-linked items from the MOS Social Support Survey were administered online. The same two-factor structure emerged for both groups – *availability of confidant* and *affection & fun*. Controlling for sex, perceived stress and personality, total ESS contributed significantly to the models of both age groups; but more strongly to the older. When the ESS subscales were treated

separately, both were found to contribute approximately equal amounts to the depression model of emerging adults; *availability of confidant* emerged as a stronger predictor in older adults.

Conclusion

ESS is an important predictor of depression throughout the lifespan, but moreso in older than in emerging adults. *Availability of confidant* is particularly relevant in older age, but is similar in importance to *affection & fun* in emerging adulthood.

Keywords:

Social support; wellbeing; socioemotional selectivity; Erikson; lifespan

Introduction

There are many psychosocial predictors of depression, but one of those which has attracted a lot of research attention is that of perceived social support (PSS). An abundance of research, from across the lifespan, has found that PSS is negatively associated with depression – for example Lee, Dickson, Conley and Holmbeck (2014), in a prospective study of 1,118 first year college students, found PSS predicted lower depression scores; and Schwarzbach, Luppa, Forstmeier, König and Riedel-Heller (2014), in a systematic review of the literature, found PSS to be associated with fewer depressive symptoms in older adults. This impact of PSS can be explained in terms of a direct effect, whereby PSS contributes to wellbeing independent of context, and of a stress-buffering effect, which sees PSS protect one against the negative impact of stress on wellbeing (Kawachi & Berkman, 2001); although the stress-buffering approach commonly suggests that PSS may work by buffering stress, while structural support (an objective measure of the size and composition of one's social network) has a direct effect, the research evidence does show both main and stress-buffering effects of PSS (e.g. Mitchell, Evans, Rees & Hardy, 2014; Toro, Tulloch & Ouellette, 2008).

While the relationship of PSS to wellbeing seems well established in principle, it is of course simplistic to imagine that the effect is uniform throughout the population. Research has shown that the relationship may be moderated by, inter alia, culture, personality, and expectations (Dwyer, Murphy, O'Sullivan & Di Blasi, 2014; Lam & Power, 1991; Nemoto, 1998). A dimension which seems to promise a moderating effect is age.

Socioemotional Selectivity Theory (SST) was advanced by Carstensen (e.g. 1995) as a means to explain differences in patterns of social relationships between different age groups, in particular the reduction in social network size with age. SST posits that our social interactions are underpinned by various motives, including development of self-concept, acquisition of information, cultivation of new relationships, and emotional regulation; while these motives are to be found throughout the lifespan, their relative importance varies with time perspective. Emotional regulation is found to be of particular moment when time remaining is perceived as limited – such as in older adulthood; therefore, SST proposes that as one ages one prefers contact with close friends rather than casual or novel acquaintances, and that the pursuit of emotional balance takes precedence over the acquisition of information or the cultivation of new relationships (Lockenhoff & Carstensen, 2004; Robertson & Hopko, 2013). Recent research by Heinze, Kruger, Reischl, Cupal and Zimmerman (2015) found that older people's emotional wellbeing benefited more from social support from friends than from other sources, while a systematic review of depression in elders by Schwarzbach et al. (2014) has found that the bulk (though not all) of the evidence points to emotional support being associated with less depressive symptoms. On this basis we might expect emotional social support to have a greater role in protecting against depression in older than in younger people.

However it is not simply the case that the relative value of emotionally relevant PSS will vary with age; it may also be the case that the relative contributions of different types of emotional support will vary across the lifespan. Erikson's

theory of psychosocial development (1950) suggests that the lifespan can be divided into eight stages, each of which is characterized by a particular conflict. In older age, this conflict is 'ego integrity vs. despair', involving making sense of our lives and appraising our accomplishments; this stage involves dealing with both successes and failures, and coming to accept them. On the basis of this understanding of older age, we might infer that more active emotionally regulatory social engagement would contribute to wellbeing, with the presence of someone to discuss emotionally meaningful topics being of benefit – akin to the notion of 'life review' as a means to improve wellbeing in later life (Bohlmeijer, Roemer, Cuijpers & Smit, 2007); and indeed the systematic review of Schwarzbach et al (2014) did find that the presence of a confidant was a consistent predictor of less depression in older people. The stages of adolescence and early adulthood however ('identity vs. role confusion' and 'intimacy vs. isolation' respectively) are related to the developing of one's self-concept and one's ability to experience intimacy, both of which would likely involve not alone confidant-style relationships but also greater amounts of positive social and affectionate support; engagements and mutually satisfying relationships that contribute to one's self-concept and sense of being loved and needed.

The present study attempts to address this matter in different life phases: among older people (aged 60 and over); and among people in emerging adulthood (ages 18-25; Arnett, 2000), a life stage which shares features of adolescence and early adulthood. In order to examine the question, the Medical Outcomes Study Social Support Scale (MOS-SSS; Sherbourne & Stewart, 1991) was employed; this scale assesses availability of several of the types of emotionally meaningful

engagement outlined above, as well as tangible support. For the purposes of this study those items which address tangible support are omitted from the analysis, and those relating to availability of support from a confidant, positive social interaction, and affection are included. Following the conducting of Principal Components Analyses in both the younger and older groups, two dimensions of emotional support were employed as independent variables – *availability of confidant* and *affection & fun.* It is predicted that these emotionally meaningful forms of PSS will be associated with depression scores to a greater extent in older than in younger adults; and that support from a confidant will prove relatively more important in older than in younger participants, while positive social interaction and affection will be relatively important in emerging adulthood.

As the personality traits of neuroticism, extraversion and conscientiousness (Klein, Kotov & Bufferd, 2011) have been found to be associated with depression scores, and there is some evidence linking depression scores to aspects of openness to experience and agreeableness (Jourdy & Petot, 2017), all of the Big Five personality traits are included as control variables. In addition, stress has regularly been reported to be associated with depression scores (Hammen, Kim, Eberhart & Brennan, 2009), and so is also controlled for in this study.

Method

Design

A cross-sectional, survey style design was employed.

Participants

This study involved data from two age groups: 74 older adults (aged 60-83), with a mean age of 65.93 (sd = 5.4), and of whom 39 were female and of whom 32.4% were single; and 538 emerging adults, with a mean age of 20.29 (sd=2.00), of whom 396 were female, and of whom 95% were single. The younger participants were recruited from among university students in a city in Ireland, while the older group was recruited through older adult advocacy groups, local active retirement groups, and online fora.

Instruments

Depression score was assessed through the use of the Center for Epidemiologic Studies Depression scale (CES-D; Radloff, 1977). This is a 20-item scale, with each item having four response options. Respondents are invited to indicate how frequently they felt or behaved in certain ways during the previous week. Sample items include "I was bothered by things that usually don't bother me", "I felt lonely" and "I had crying spells". Scores can range from zero to 60, the higher the score the greater the symptoms. The scale has been validated against DSM-IV diagnostic criteria (Okun, Stein, Buman & Silver, 1996). Across three episodes of data gathering with community samples, and one with a sample of psychiatric patients, Radloff reported Cronbacb's alpha values ranging from .84 to .90. In the

present study, Cronbach's alpha was .85 for the older group and .92 for the younger group.

Emotional PSS (ESS) was assessed by using the Medical Outcomes Study Social Support Survey (MOS-SSS; Sherbourne & Stewart, 1991). This is a 19-item scale which the authors report to include four subscales – emotional/informational, affectionate, tangible, and positive social interaction. Convergent and divergent validity was demonstrated through correlations with a range of mental and physical wellbeing measures. For the purposes of the present study, the overtly non-emotional (i.e. tangible) items were not used, leaving a 15-item scale. Each item is scored on a five-point Likert scale, rendering a potential range of 15 to 75, the higher the score the greater the support. Cronbach's alpha for this revised scale was .96 for the younger group and .97 for the older group. When a Principal Components Analysis was conducted on these 15 items, the same two subscales emerged for both age groups: the first related to *availability of confidant,* including the same eight items as the original authors' 'emotional/informational' subscale (for example "Someone to share your most private worries and fears with" and "Someone who understands your problems"); and the second related to *affection and fun*, including the six items from the original authors' 'affectionate' and 'positive social interaction' subscales (e.g. "Someone who shows you love and affection" and "Someone to have a good time with"), plus the only single item in the original scale (i.e. "Someone to do things with to help you get your mind off things"). Cronbachs's alphas for *availability of confidant* were .95 in the younger group and .97 in the older group. Cronbach's alphas for *affection and fun* were .94 in the younger group and .97 in the older group.

Personality was assessed using the 10-item Big Five Inventory (BFI-10; Rammstedt & John, 2007). Each of the Big Five personality dimensions – Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism – are measured through two items. This is a shortened version of the full 44-item BFI, and correlates well with the full scale, while also showing good construct validity and test-retest reliability. As a measure of internal consistency, Rammstedt and John reported part-whole correlations for each item and its subscale total, ranging from .70 to .90. In the current study, part-whole correlations ranged from .73 to .87 in the older group, and from .61 to .87 in the younger group.

Stress was measured through the use of the 14-item Perceived Stress Scale (PSS-14; Cohen, Kamark & Mermelstein, 1983), with each item scored on a five-point scale. Scores can range from 14 to 70, the higher the score the greater the stress. The scale correlates highly with measures of depression and social anxiety. Cohen et al. reported Cronbach's alpha valued ranging from .84 to .86 across two student samples and one community sample. In this study, Cronbach's alpha scores for the PSS-14 were .87 for the older and .89 for the younger group.

Procedure

An electronic survey was compiled and sent to a group of 2,500 students of University College Cork, randomly selected by the University's IT system. Eight-hundred and ninety-five students responded; of these, 538 both completed the survey and belonged to the required 18-25 age range. The same survey

instrument was advertised through Irish older adult advocacy groups, active retirement groups in Cork city, and online fora frequented by Irish older people. This led to 85 responses, of which 74 were completed by people in the required age range. Analysis was conducted using SPSS 22 for Mac.

Ethics

The study was conducted with regard to the code of ethics of the Psychological Society of Ireland (2003). Ethical approval was granted by the School of Applied Psychology Ethics Committee.

Results

Analysis of the data began with the production of descriptive statistics for each of the age groups. The results are presented in Table 1.

Table 1a: Means, standard deviation and medians of continuous variables

	Younger		**Older**	
	Mean (sd)	Median	Mean (sd)	Median
CES-D	17.79 (11.33)	15	10.73 (8.73)	9
ESS	58.73 (13.45)	61	60.74 (14.41)	64
Availability of confidant	29.93 (8.25)	32	31.31 (.38)	32
Affection & fun	28.80 (6.42)	30	29.43 (7.03)	32
Neuroticism	6.47 (2.27)	6	5.08 (2.01)	6
Extraversion	6.13 (2.06)	6	5.95 (2.02)	6
Openness	7.09 (1.73)	7	6.97 (2.15)	7
Agreeableness	7.02 (1.79)	7	7.69 (1.81)	8
Conscientiousness	6.48 (1.76)	6	7.81 (2.01)	8
Stress	27.43 (8.91)	27	18.95 (9.01)	19

Table 1b: Total numbers and percentages for categorical variables

		Younger	**Older**
Sex	Male	142 (26.4%)	35 (47.3%)
	Female	396 (73.6%)	39 (52.7%)
Relationship Status	Cohabiting	15 (2.9%)	50 (68.5%)
	Non-cohabiting	511 (97.1%)	23 (31.5%)

Bivariate analyses addressing the relationships between depression scores and each of the independent variables were conducted separately for each age category. Results of Pearson product-moment correlations are presented for each group in Table 2.

Table 2: Pearson correlations of depression score and continuous IVs

IV	Younger	Older
ESS	-.50*	-.55*
Availability of confidant	-.48*	-.55*
Affection & fun	-.43*	-.46*
Neuroticism	.39*	.22
Extraversion	-.30*	-.33**
Openness	.05	-.34**
Agreeableness	-.20*	-.20
Conscientiousness	-.19*	-.24***
Stress	.77*	.70*

- p<.0005; ** p<.005; ***p<.05

As can be seen from Table 2, all of the continuous variables with the exception of openness were significantly correlated with depression scores in the younger sample, while all but neuroticism and agreeableness were correlated with depression scores for the older group. In addition to these analyses, t-tests were also conducted to assess sex differences in depression scores for both groups: no difference emerged in the older group [$t(70) = .03$, $p = .98$], while a sex difference did emerge for the younger group [$t(536) = 2.05$, $p = .04$], such that females

reported higher depression scores than males. As over 97% of the emerging adult sample reported being single, we did not examine differences in depression scores according to relationship status in this group. When we compared depression scores in older adults according to relationship status (operationalized as cohabiting or not cohabiting), no significant difference emerged [$t(71) = 1.40$, $p = .17$].

The next step in our analysis was the conducting of hierarchical multiple regressions for both of our age groups to assess the degree of variance in depression scores attributable to ESS, once potential confounders had been controlled. In order to take into consideration both the direct effect and stress-buffering effect of ESS, both the raw ESS score, and an ESS x stress interaction term, were employed. The initial regressions conducted for both groups were intended to assess the prediction that ESS would contribute more to a model of depressive symptoms for older adults than for emerging adults. For both groups, the control variables which emerged as significantly related to depressive scores bivariately were included in the first block, while total ESS and the ESS x stress interaction term were included in the second block. In both cases, the first block made a significant contribution: for the younger group explaining 61.6% of the variance in depressive score, $F(6, 531) = 141.67$, $p < .0005$; and for the older group explaining 52.1% of the variance, $F(4, 69) = 18.75$, $p < .0005$. The addition of the ESS block in both cases also made a significant contribution, though the amount of additional variance explained was markedly different: 4% in the younger group, $F(2, 529) = 30.99$, $p < .0005$; and 11.6% for the older group, $F(2, 67) = 10.68$, $p < .0005$. Using a Fisher r-to-z transformation, we found that the

difference between these proportions was significant (z = 6.34, p = .0002). The final models for both groups are presented in Tables 3a and 3b.

Table 3a: Multiple regressions for emerging adults, with depression score as DV and total ESS as main IV

IV	B	SE	β	p	Part correlation
Sex	.35	.72	.01	.62	.01
Neuroticism	.07	.15	.02	.63	.01
Extraversion	-.47	.16	-.09	.003	-.08
Agreeableness	-.16	.17	-.03	.34	-;02
Conscientiousness	-.05	.17	-.01	.79	-.01
Stress	.84	.04	.66	<.0005	.52
ESS	-.17	.03	-.20	<.0005	-.16
ESS x Stress	-.01	.00	-.07	.009	-.07

R^2 = 61.6%; F (8, 529) = 126, p < .0005

Table 3b: Multiple regression for older adults, with depression score as DV and total ESS as main IV

IV	B	SE	β	p	Part correlation
Extraversion	-.72	.37	-.17	.06	-.11
Openness	-.15	.33	-.04	.65	-.03
Conscientiousness	-.08	.33	-.02	.81	-.02
Stress	.49	.08	.51	<.0005	.43
ESS	-.11	.06	-.18	.06	-.14
ESS x Stress	-.01	.00	-.25	.008	-.20

R^2 = 63.7%; F(6, 67) = 19.57, p < .0005

In order to investigate the second prediction, that the types of ESS would have different impacts depending on life stage, further regressions were conducted. Again, the first blocks in both cases consisted of the control variables which had emerged as significant in the bivariate analyses. Two further blocks were added in each case – one being availability of confidant, and its stress interaction term; the other being affection & fun, and its stress interaction term. So as to get a measure of the relative importance of each form of ESS the regressions were run twice, with each ESS variable and its stress interaction term being added as the second block in one case and as the third block in the other.

For the younger group, adding the confidant variables as block 2 led to a significant improvement in the model, adding 3.4% to the variance explained, $F(2, 529) = 25.6$, $p < .0005$. Adding the affection & fun variables as the third block added a further 0.8%, $F(2, 527) = 5.89$, $p = .003$. When the order of entry was reversed, the addition of the affection & fun variables added 3.2% to the variance explained, $F(2, 529) = 23.85$, $p < .0005$; while the further addition of the confidant variables added 1% to the variance explained, $F(2, 527) = 7.53$, $p = .001$. Thus, controlling for individual differences and stress, availability of a confidant adds between 1% and 3.4% to the model, while affection & fun adds between 0.8% and 3.2%.

For the older group, adding the confidant variables as block 2 led to a significant improvement in the model, adding 13.3% to the variance explained, $F(2, 67) = 12.82$, $p < .0005$. Adding the affection & fun variables as the third block added a

further 0.2%, F (2, 65) = .20, p = .82. When the order of entry was reversed, the addition of the affection & fun variables added 8.3% to the variance explained, F(2, 67) = 6.98, p - .002; while the further addition of the confidant variables added 5.2% to the variance explained, F(2, 65) = 4.92, p = .01. Thus, controlling for individual differences and stress, availability of a confidant adds between 5.2% and 13.3% to the model, while affection & fun adds between 0.2% and 8.3%. The final regression models for both younger and older groups are presented in Tables 4a and 4b.

The lower proportion of the variance attributable to presence of a confidant in the older sample (5.2%) remained greater than the higher proportion attributable to presence of a confidant in the younger sample (3.4%) Using a Fisher r-to-z transformation, we found that the difference between these proportions was significant (z = 1.98, p = .047), and we therefore conclude that presence of a confidant is a stronger contributor to the older groups' depression scores than to those of the younger group. As there was considerable overlap between the ranges for affection & fun in both groups, it was decided not to run this test for these proportions.

Table 4a: Multiple regression for emerging adults, with depression score as DV and availability of confidant and affection & fun as separate ESS IVs

IV	B	SE	β	p	Part correlation
Sex	.35	.72	.01	.62	.01
Neuroticism	.07	.15	.02	.63	.01

Extraversion	-.47	.16	-.09	.003	-.07
Agreeableness	-.16	.17	-.03	.34	-.03
Conscientiousness	-.05	.17	-.01	.79	-.01
Stress	.84	.04	.66	<.0005	.52
Confidant	-.13	.05	-.10	.01	-.07
Confidant x Stress	-.01	.01	-.09	.022	-.06
Affection & Fun	-.22	.06	-.12	.001	-.09
Affection & Fun x Stress	.00	.00	.01	.77	.01

R^2 = 65.7%; F (10, 527) = 100.99, p < .0005

Table 4b: Multiple regression for older adults, with depression score as DV and availability of confidant and affection & fun as separate ESS IVs

IV	B	SE	β	p	Part correlation
Extraversion	-.72	.37	-.17	.06	-.11
Openness	-.15	.33	-.04	.65	-.03
Conscientiousness	-.08	.33	-.02	.81	.02
Stress	.49	.08	.51	<.0005	.40
Confidant	-.22	.13	-.21	.08	-.13
Confidant x Stress	-.03	.02	-.36	.048	-.15
Affection & Fun	-.00	.16	-.00	.98	.00
Affection & Fun x Stress	.01	.02	.10	.57	.04

R^2 = 65.6%; F(8, 65) = 15.46, p < .0005

Discussion

The purpose of this study was twofold: to examine SST's (Carstensen, 1995) predictions in terms of the importance of ESS across the lifespan; and to consider SST in the context of Erikson's (1950) psychosocial model by assessing the relative importance of subtypes of ESS in different life stages.

The first prediction was examined through assessing the contributions of total ESS, plus its interaction with stress, to depression scores in both emerging and older adults. On the basis of SST, we had expected that this would be more strongly negatively associated with depressive scores in older people. The results supported this prediction: controlling for personality, sex and stress, the ESS variables accounted for 11.6% of the variance in older people's depression scores, and only 4% in those of emerging adults; while Fisher's r-to-z transformation showed this difference to be significant. This is consistent with the notion that emotional regulation is a more prominent motivator of social engagement in older people, and so is consistent with SST.

The next prediction involved assessing the relative impacts of availability of a confidant, and of affection & fun, to depression scores in the two groups. This involved examining the contributions of both of these variables, plus their stress interactions, to predictive models of depression for both groups. In each case, we controlled for sex, personality and stress; we then entered two further blocks, each consisting of one ESS subtype and its stress interaction; these analyses were run twice for each age group, alternating the order of entry of the subtypes.

Doing this, we found that in the older group availability of a confidant added between 5.2% and 13.3% to the model, while affection & fun added between 0.2% and 8.3%. Examining the final model, we see that the confidant x stress interaction was the only significant unique predictor, but that the main effect of availability of confidant approached significance. Applying the Fisher r-to-z transformation, we found that the difference between the higher proportion for the younger group and the lower proportion for the older group was still significant, with presence of a confidant being a stronger contributor to depression scores for the older participants. Neither of the affection & fun variables were close to being significant unique predictors. In the younger group, we found that the availability of a confidant block added between 1% and 3.4% to the model, while the affection and fun block added between 0.8% and 3.2%. While both of the confidant-related variables and the direct effect of affection & fun emerged as significant unique predictors, examination of the part correlations shows that they did not predict as much of the variance in depression scores in emerging adults as the confidant-related variable did in older adults. These findings support the second prediction; that availability of a confidant would be relatively important in older adulthood, with affection and fun being relatively important in emerging adulthood.

This latter finding is consistent with Erikson's psychosocial model, as outlined in the introduction. Furthermore, the strength of the contributions of the stress interactions of both total ESS and availability of confidant in older adults add to this interpretation; that the process of appraising one's life and achievements can be difficult, and calls for emotional regulation through discussing worries

and concerns with trusted friends. Conversely, the developmental demands of emerging adulthood involve less need for emotional regulation, and draw more on affection & fun than in older age.

These findings add to the notion that ESS is particularly important in later life, but indicate that not all such support will be equally useful; while affection & fun are helpful, the major benefits seem to accrue from more meaningful relationships with the possibility of engaging directly with worries and concerns.

This study is not without limitations. Convenience sampling was employed so one cannot assume the samples are representative of their populations, and all members of the emerging adulthood group were recruited from a single university campus which still further limits generalizability. In addition to this, the size of the older adult sample was relatively small – efforts were made to increase the number of older participants in order to make group sizes less uneven, but without success. Nonetheless, the results are in keeping with theory and add to the body of knowledge in relation to the association of PSS and wellbeing across the lifespan.

In conclusion, this research study supports SST's prediction of the relative importance of emotional regulation derived from PSS in later years by comparison to emerging adulthood, but also indicates that the relative importance of confidant relationships and affectionate & fun relationships varies with life stage.

Conflicts of Interest: None

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